Console support in a Simple Environment

```
Server                                    3
                                                    2
  web-console (browser)                                    Console host           1

  Web server software                net          web-console (browser)

  Console support                                   Other software modules
  software
                                                        9
        Web server interface          6
        Other service modules
                                7
        5
```
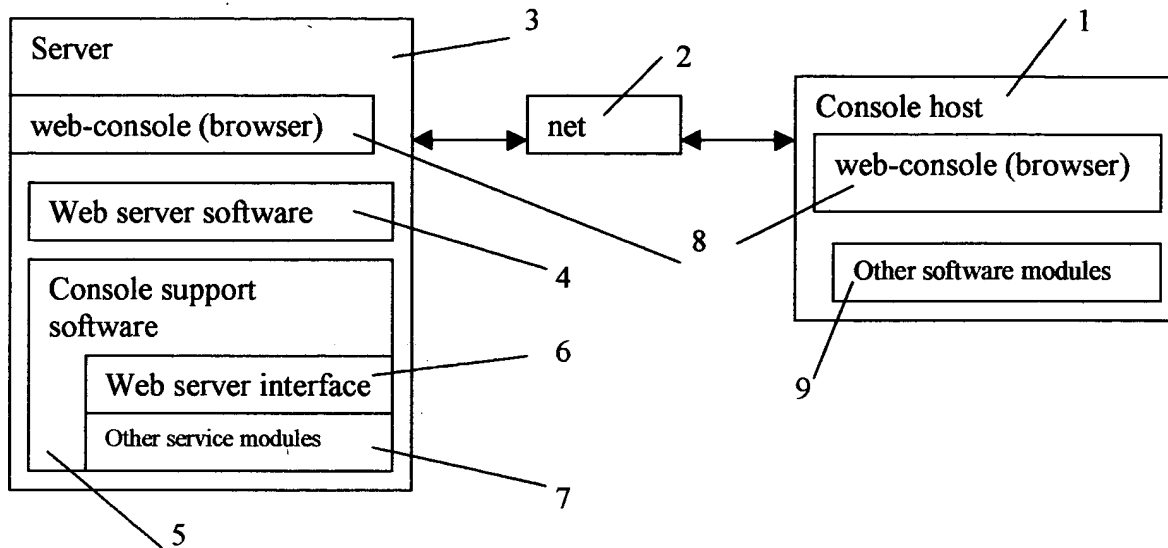
. **FIG. 1**

Console support in CCDSVM environment

system unit

Service modules — 3
                   — 8

system unit

Service modules

system unit   12

Service modules

system unit

Service modules

Net2

2

Control Management
Station   Net1   11

Web console (native) — 9

Web server — 7   10

Console support   Client Host

Web server interface
                           — 6
Control management
                           — 5

                              4   Client Host

Console host — 1

Web-console /browser
                    — 9   Console host
Other software module
                             Web-console / browser

                      13

                             Other software module

Fig. 2

Data traveling between web-console and console supporting software

a) Data Path 1:

Referred as sending data from web-console (9 of Fig. 2) to console support software

(6 of Fig. 2) or referred as console supporting software (6 of Fig. 2) get data from

web-console (9 of Fig. 2).

| Web-console on console host | → | Web server software on control management station | → | Console support software on control management station |
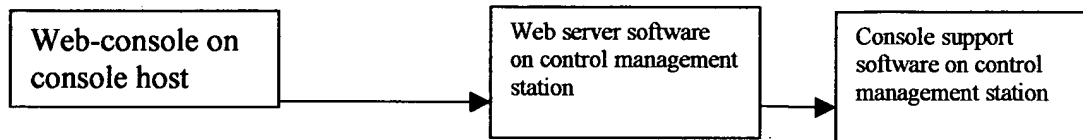
b) Data Path 2: (reverse path)

Referred as sending data from console supporting software (6 of Fig. 2) to web-

console (9 of Fig. 2) or referred as web-console (9 of Fig. 2) gets data from console
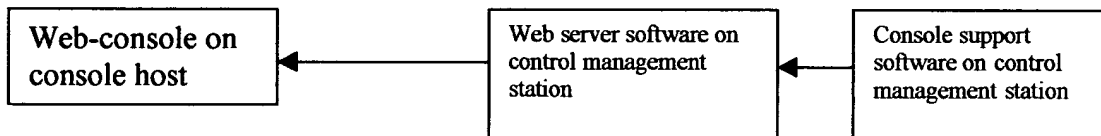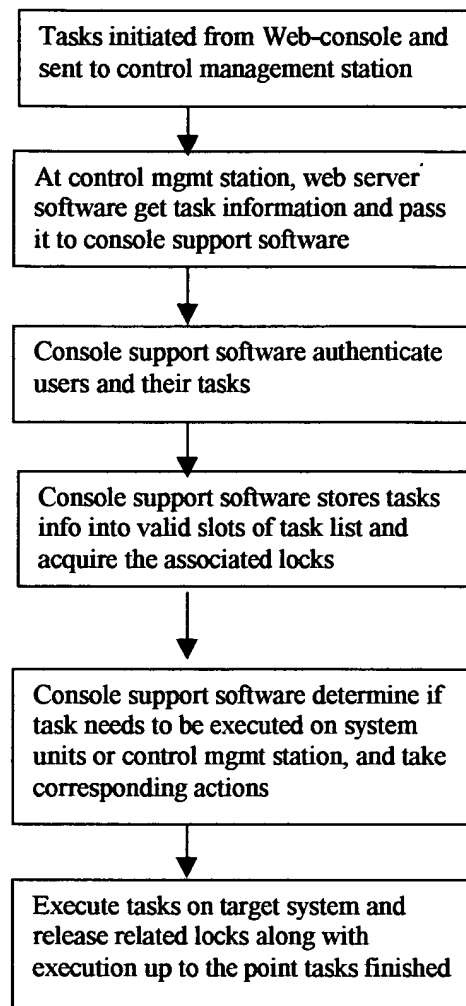
supporting software (6 of Fig. 2)

| Web-console on console host | ← | Web server software on control management station | ← | Console support software on control management station |

Fig. 3

Basic Task & Operation Processing Flow Chart in a CCDSVM environment.

```
┌─────────────────────────────────────┐
│ Tasks initiated from Web-console and │
│ sent to control management station   │
└─────────────────────────────────────┘
                  │
                  ▼
┌─────────────────────────────────────┐
│ At control mgmt station, web server  │
│ software get task information and pass│
│ it to console support software       │
└─────────────────────────────────────┘
                  │
                  ▼
┌─────────────────────────────────────┐
│ Console support software authenticate│
│ users and their tasks                │
└─────────────────────────────────────┘
                  │
                  ▼
┌─────────────────────────────────────┐
│ Console support software stores tasks│
│ info into valid slots of task list and│
│ acquire the associated locks         │
└─────────────────────────────────────┘
                  │
                  ▼
┌─────────────────────────────────────┐
│ Console support software determine if │
│ task needs to be executed on system  │
│ units or control mgmt station, and take│
│ corresponding actions                │
└─────────────────────────────────────┘
                  │
                  ▼
┌─────────────────────────────────────┐
│ Execute tasks on target system and   │
│ release related locks along with     │
│ execution up to the point tasks finished│
└─────────────────────────────────────┘
```
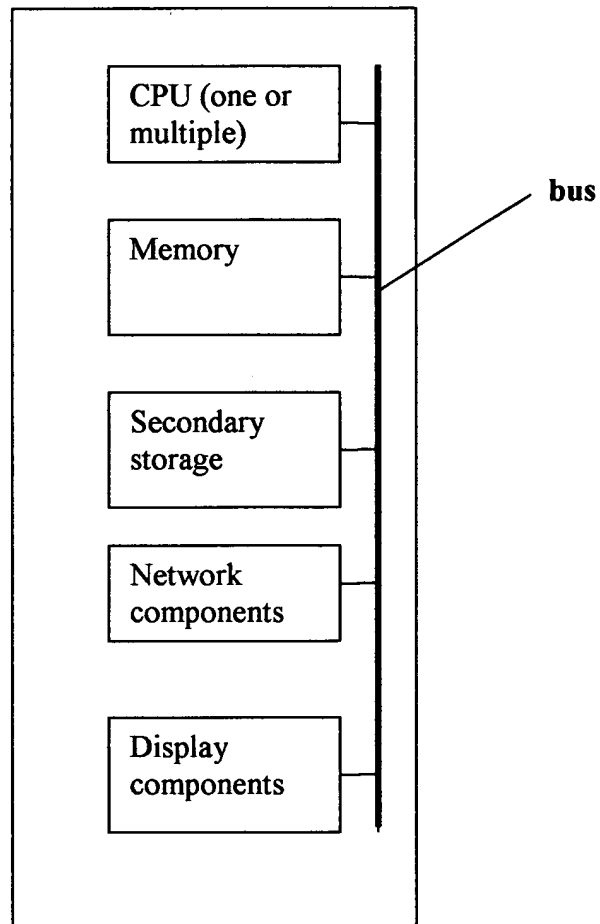
FIG. 4

The abstraction of data structure for multiple simultaneous concurrent tasks and operations support in CCDSVM environment.

Task List

| S(1) | S(2) | S(3) | .... | ...... | .... | .... | S(n) |

Task Info

Task Info

Task Info
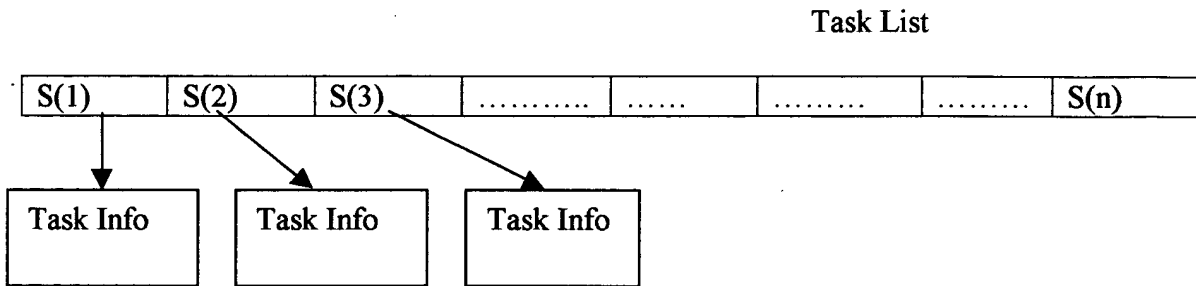
Fig. 5

A Layered CCDSVM structure
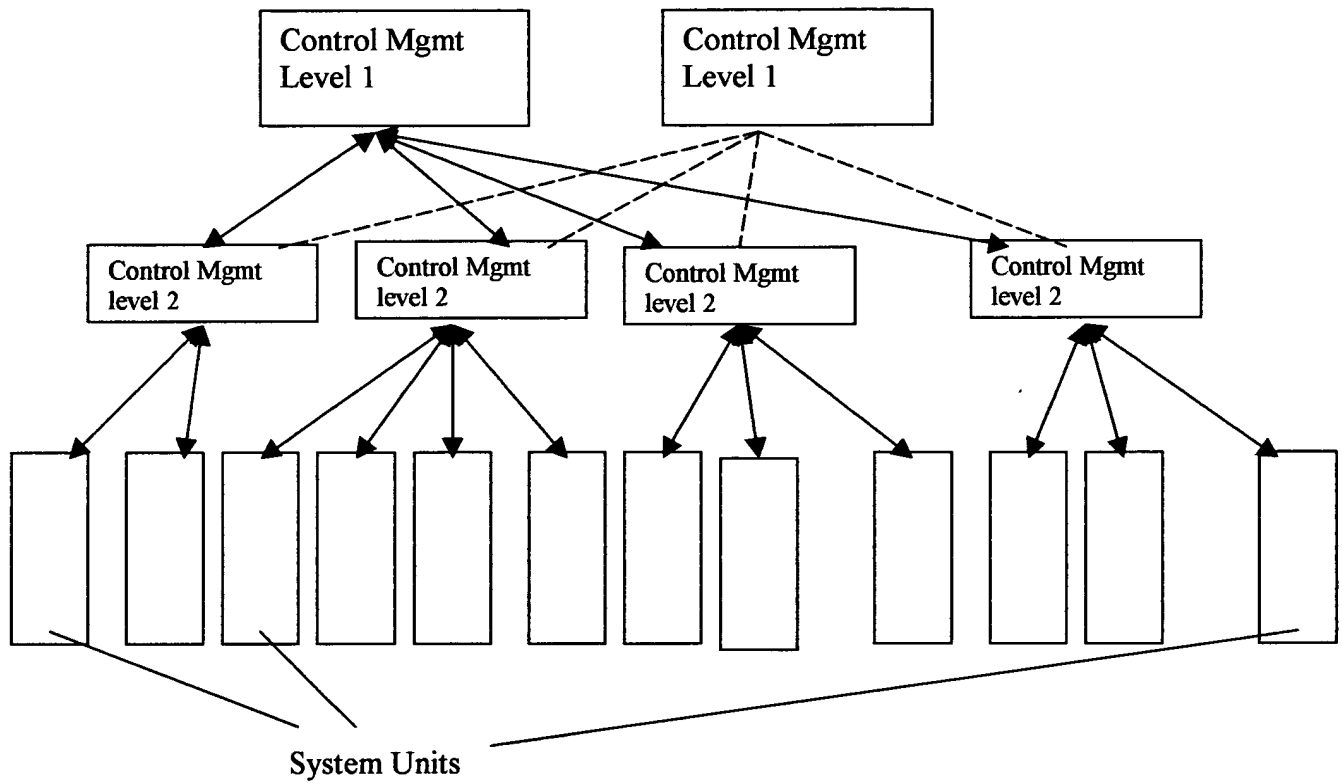
Fig. 6

The typical hardware components of control management station, system units, and console hosts.

Fig. 7